



NCI Workshop on Lineage Plasticity and Androgen Receptor (AR)- Independent Prostate Cancer

**Meeting Agenda
December 6 -7 , 2018**

NIH Main Campus, Building 31C, 6th Floor, 9000 Rockville Pike, Bethesda MD 20892

Thursday, December 6, 2018

8:00am NCI Welcome

8:05 Focused overview and critical questions *Himisha Beltran*

Lineage Plasticity: The Scope of the Problem
Moderators: Peter Nelson and Charles Sawyers

8:15 Lineage Plasticity in Lung Cancer *Charles Rudin*

Lineage Plasticity Supports Therapeutic Resistance in Pancreatic Ductal Adenocarcinoma *Rosalie Sears*

Lineage Plasticity in Melanoma *Richard White*

Breast Cancer Stem Cell Plasticity and Treatment Resistance *Max Wicha*

Lineage Plasticity in Prostate Cancer *Charles Sawyers*

Discussion

10:10 - 10:20 BREAK

Cellular and Molecular Biology of AR-Independent Prostate Cancer
Moderators: Timothy Thompson and Jeffery Hildesheim

10:20 Prostate Cancer Lineages: How Many Are There? and How Plastic Are They? *Peter Nelson*

Origin of Prostate Neuroendocrine Cells *Michael Shen*

Driving Prostate Epithelial Cells to Variant Prostate Cancer Differentiation States *John Lee*

Prostate Cancer Dedifferentiation and Redifferentiation *David Goodrich*

Preclinical Models of Lineage Plasticity *Kathleen Kelly*

New Metabolic Vulnerabilities in Neuroendocrine Prostate Cancer *Maria Diaz-Meco*

Hormone Therapy Induces Reprogramming to Drive Aggressive Prostate Cancer *Amina Zoubeidi*

Stromal Cell Plasticity and Emergent Biology in the Tumor Microenvironment *David Rowley*

12:50 - 1:20

LUNCH

Translational Strategies
Moderators: William Dahut and Evan Yu

1:20	Clinical and Molecular Pathologic Characteristics of Small Cell/Neuroendocrine Prostate Cancer from the West Coast Dream Team	<i>Eric Small</i>
	Molecular Pathology	<i>Mark Rubin</i>
	Targets in Clinical Development	<i>Himisha Beltran</i>
	Immune Landscape and Opportunities for Immuno-Oncology	<i>James Gulley</i>
	Developing Drugs in the Context of Lineage Plasticity and AR Independence	<i>Howard Scher</i>

2:50 - 3:00

BREAK

BREAKOUT GROUPS

3:00 - 5:00 Four Working Groups will convene to deliberate on ways to further elucidate the basic understanding of the phenomenon of lineage plasticity and AR-Independent prostate cancer and to discuss ways to translate emerging knowledge in the field towards patient care.

Before the meeting: Working Groups had conference calls where they developed key questions and possible proposals to the larger group.

During the meeting: Working Groups will prioritize top questions, review the data to date, address requirements to answer the questions, present early aims to address the questions.

Potential deliverable will be the identification of major gaps of knowledge in the field and the generation of novel ideas on how to address the scientific and clinical challenges.

Cancer Biology Working Group 1 (Basic Basic, WG 1)
Leaders: Timothy Thompson, Jennifer Isaacs, Jeffery Hildesheim

Cancer Biology Working Group 2 (Basic Preclinical, WG 2)
Leaders: Peter Nelson, Kathleen Kelly, Himisha Beltran

Preclinical Models Working Group (WG 3)
Leaders: Mark Rubin, Massimo Loda

Clinical Working Group (WG 4)
Leaders: Howard Scher, William Dahut, Evan Yu

Pathology Working Group (WG 5) - Meets only on Day 2
Leaders: Massimo Loda, Tamara Lotan

5:00 - 5:30 Working Group Recap

Friday, December 7, 2018

8:00 Working Groups 1-5 meet separately to discuss key issues and finalize slides

**Plenary Session:
Working Group Outcomes**

Each Working Group will present the outcome their deliberation on solving key questions addressing lineage plasticity and AR-independent prostate cancer. They will discuss their consensus recommendations for the path forward, highlighting data in support of possible research concepts and early aims to advance the field.

10:00 Cancer Biology Working Group 1 (Basic Basic, WG 1)

10:15 Cancer Biology Working Group 2 (Basic Preclinical, WG 2)

10:30 Preclinical Models Working Group (WG 3)

10:45 Pathology Working Group (WG 5)

11:00 Clinical Working Group (WG 4)

11:15 Meeting report discussion, recommendations, and closing remarks

12:00 Adjourn

Working Group Membership

Cancer Biology Working Group 1 (Basic Basic, WG 1) Leaders: Timothy Thompson, Jennifer Isaacs, Jeffery Hildesheim

Members

Sarki	Abdulkadir	Jennifer	Isaacs
Munjid	Al Harthy	Ron	Johnson
Marijo	Bilusic	Ian	Mills
Leland	Chung	David	Mulholland
Gregory	David	Steve	Nothwehr
Maria	Diaz Mecó	David	Rickman
Suzanne	Forry	David	Rowley
Michael	Freeman	Harkirat	Singh Sandhu
David	Goodrich	Timothy	Thompson
Jeff	Hildesheim	David	VanderWeele
Jennifer	Isaacs	Elisa	Woodhouse
Ron	Johnson	Amina	Zoubeidi

Cancer Biology Working Group 2 (Basic Preclinical, WG 2) Leaders: Peter Nelson, Kathleen Kelly, Himisha Beltran

Members

Joshi	Alumkal	Colm	Morrissey
Steven	Balk	Peter	Nelson
Himisha	Beltran	Claudia	Palena
Nancy	Boudreau	Charles	Rudin
Arul	Chinnaiyan	Charles	Sawyers
Eva	Corey	Jeffrey	Schlom
Toby	Hecht	Rosalie	Sears
Andrew	Hruszkewycz	Douglas	Spitz
Jiaoti	Huang	Shiv	Srivastava
Jane	Johnson	Jane	Trepel
Kathleen	Kelly	Richard	White
Karen	Knudsen Costello	Max	Wicha
Tamara	Lotan		
Jun	Luo		

Preclinical Models Working Group (WG 3) Leaders: Mark Rubin, Massimo Loda

Members

Julia	Arnold	John	Lee
Anke	Augspach	Massimo	Loda
Yu	Chen	Nora	Navone
Francesca	Demichelis	Jung Wook	Park
Leigh	Ellis	Mark	Rubin
W. Douglas	Figg	Michael	Shen
Andrew	Goldstein	Adam	Sowalsky
Leah	Hubbard	Jindan	Yu
Jennifer	Jones		

Clinical Working Group (WG 4)
Leaders: Howard Scher, William Dahut, Evan Yu

Members

Emmanuel	Antonarakis	Wolf	Lindwasser
Ana	Aparicio	Christopher	Logothetis
Lawrence	Baizer	Bhupinder	Mann
Alan	Bryce	Jeff	Michalski
William	Catalona	Charles	Ryan
Peter	Choyke	Howard	Scher
William	Dahut	Elad	Sharon
Samuel	Denmeade	Eric	Small
Adam	Dicker	Walter	Stadler
James	Gulley	Mary Ellen	Taplin
Stephanie	Harmon	Abdul	Tawab-Amiri
Deborah	Jaffe	Baris	Turkbey
Fatima	Karzai	Peter	Ujhazy
Gary	Kelloff	Richard	Vetter
William	Kelly	Pamela	West
Steven M.	Larson	Evan	Yu
Daniel	Lin		

Pathology Working Group (WG 5)
Leaders: Massimo Loda, Tamara Lotan

Members

Arul	Chinnaiyan
Andrew	Hruszkewycz
Jiaoti	Huang
Gary	Kelloff
Massimo	Loda
Tamara	Lotan